



# Appendix A (3 pages)

**amesaward.com**  
Car/Truck Brand/Model Awards  
2001 Model Year Criteria Description ©

General Note: These criterion are based on a life-cycle-analysis methodology that sales weights vehicle configuration or model type emission certification levels, fuel economy ratings and use of recycled material content into a brand/model Automotive Market Environmental Sensitivity (AMES) index score used to rank the brand/models in fifteen vehicle utility classes (VUC).

Awards are provided for: "Best" performance– AMES BEST (VUC) AWARD™ and top quartile performance– AMES PREFERRED (VUC) AWARD™. This allows the consumer to prioritize their shopping by brand and model name, the most recognizable nomenclature in the marketplace today.

## Pollution Prevention

A Pollution Prevention Index (PPI), which is the sales-weighted average of the certification levels within each brand/model offering, is determined as follows:

Vehicle configuration (i.e., "model type" using the regulatory nomenclature) sales<sup>1</sup> percent within the brand/model multiplied by the applicable certification value (see below) and rounded<sup>2</sup> to the nearest tenth. The certification levels corresponding to the certification values are as described in the US EPA Office of Mobile Sources publication EPA 420-B-98-001 and State of California Air Resources Board Proposed California Motor Vehicle Emission Control and Smog Index Label Specifications dated 6/1/99:

<u>Certification Value</u>		<u>Certification Level</u>
<u>Gas</u>	<u>Diesel</u>	
10.9	0.0	FTP Tier 1/LDT4
18.2	7.2	FTP Tier 1/LDT2/LTD3
26.4	15.4	FTP Tier 1
28.5	23.8	FTP TLEV
31.6	31.6	FTP LEV
39.0	39.0	FTP ULEV
40.7	40.7	FTP LEV II
43.3	43.3	FTP SULEV

## Non-specific Propulsion FTP ZEL 50.0

Range of ratings = 0.0 – 50.0

- Notes: <sup>1</sup> Sales volumes as submitted to EPA with the Manufacturer's Application for Certification (see 40 CFR Part 86) or projections developed by amesaward.com.  
<sup>2</sup> Using the procedure and/or definitions described in Microsoft Office 98 Excel default rounding procedures.

### Energy Efficiency

An Energy Efficiency Index (EEI), which is the sales-weighted average combined city and highway fuel economy for the brand/model scaled to this criteria, is determined as follows:

Vehicle configuration adjusted (see *DOE/EPA MY1999 Fuel Economy Guide*, page 1 note) fuel economy harmonic sales weighted into an average city/highway (55%city/45%highway) brand/model fuel economy adjusted to fit the fuel economy range in the *DOE/EPA MY2001 Fuel Economy Guide* multiplied by 40 to scale to the PPI rating and rounded<sup>2</sup> to the nearest tenth ( $EEI = 40 \{1/M_1 - 1/M_x\} / \{1/M_1 - 1/M_2\}$  where  $M_1$  = lowest mileage in *2001 FE Guide* {combined TBD mpg};  $M_2$  = highest mileage in *2001 FE Guide* {combined TBD mpg}; and  $M_x$  = sales weighted combined mileage of the brand/model).

Range of ratings = 0.0 to 40.0

### Recycled Material Content

A Recycled Content Index (RCI), which is the sales-weighted percent of curb weight that is comprised of recycled material for a brand/model scaled to this criteria, is determined as follows:

Vehicle configuration by fraction of curb weight of the use of recycled materials (post consumer or post industrial recycled materials) sales<sup>1</sup> weighted into an average brand/model multiplied by 10.0 to scale to PPI rating and rounded<sup>2</sup> to the nearest tenth (100% recycled material content = 10.0). *Lack of an industry accepted protocol for reporting this information precludes the use of the RCI for the 2001 model year.*

Range of ratings = 0.0 to 10.0

### Brand/Model Award

Each brand/model within a vehicle utility class has established an Automotive Market Environmental Sensitivity Index (AMESI) which is the summation of adding the Pollution Prevention Index, the Energy Efficiency Index and the Recycled Content Index (in future model years) together and comparing their AMESI to the other entries in the class.

Approximate Range of AMESI ratings = 0.0 to 100.0

Notes: <sup>1</sup> Sales volumes as submitted to EPA with the Manufacturer's Application for Certification (see 40 CFR Part 86) or projections developed by [amesaward.com](http://amesaward.com).

<sup>2</sup> Using the procedure and/or definitions described in Microsoft Office 98 Excel default rounding procedures.

### Vehicle Utility Class Definition

For cars, the vehicle utility classes are defined as: Subcompact, Compact, Mid-Size, Full-Size, Premium, Luxury, Sporty Car and Sports Car (based on body style, specifications, perceived market position and price).

For trucks, the vehicle classes are defined as: Minivan, Full-Size Van, Compact Pickup, Full-Size Pickup, Compact Sport Utility Vehicle, Mid-Size Sport Utility Vehicle and Full-Size Sport Utility Vehicle (based on body style, specifications, perceived market position and price). Additionally, for pickups – generally based on gross vehicle weight rating (gvwr) under 4,500 pounds for Compact pickup and 4,500 pounds gvwr and above for Full-Size pickup. Generally for sport utilities – cargo volume less than or equal to 65 cubic feet for Compact SUVs, cargo volume greater than 65 cubic feet but less than or equal to 90 cubic feet for Mid-Size SUVs and greater than 90 cubic feet for Full-Size SUVs.

### Separate Brand/Model Definition

To acknowledge manufacturers that exceed emissions standards required by regulation and/or provide high fuel efficiency technology and/or reach leading levels of recycled material content, a vehicle can be considered a separate brand/model offering in a segment if it meets the following provisions:

1. A unique brand/model name or supplemental name (e.g., Ford – Ranger Electric, Chrysler – Epic, Chevrolet – S10 Electric) is physically on the vehicle and used for promotional purposes.
2. Offerings are generally available to the public.

### Electric Vehicle MPG Equivalency

See Department of Energy's (DOE) Final Rule making published in the Federal Register: July 12, 2000 (Volume 65, Number 113) 10 CFR Part 474, i.e., for Watt-hours of energy per gallon of gasoline conversion factor including petroleum-powered accessories installed =

33.705 KWh/ gal (no petroleum-powered accessories)  
30.334 KWh/gal (petroleum-powered accessories)